

REMARKS

Applicants reply to the final Office Action dated on October 7, 2010, within two months. Claims 1-72 are pending, but claims 16-17, 25, 32-43 and 47-72 have been withdrawn from consideration. The Examiner rejects claims 1-15, 18-24, 26-31 and 44-46. Applicants respectfully request reconsideration of this application. The Examiner includes claim 32 in the rejections, but Applicants believe that claim 32 is currently withdrawn. If Applicants are incorrect, then Applicants add claim 32 to the arguments below.

The Examiner rejects claims 1-15, 18-24, 26-31 and 44-46 for lacking adequate written description disclosure. In particular, the Examiner asserts that the negative limitation "without collagenase" fails to comply with the written description requirement as there is no evidence of record to support the above negative limitation. Applicants respectfully disagree with these rejections.

Applicants assert that strong support for the negative limitation of "without collagenase" is clearly disclosed, for example, on page 80, lines 32-33 of WO2005/042730. Applicants wish to specifically highlight, for example, Example 2, particularly the bridging paragraph of page 80, line 32 to page 81, line 4 of WO2005/042730 which specifies that:

"The following two methods do not require processes using enzymes such as collagenase, the methods are distinct from conventional methods and stem cells from fat tissue prepared by conventional methods in that there is no contamination of enzymes such as collagenase." (Emphases added)

Applicants also assert that those skilled in the art, in light of the above context, would have been able to clearly understand that the negative limitation as claimed (in this case, "without collagenase") is adequately described in the specification as filed.

Specifically, as indicated above, the methods of the claimed invention disclosed in, for example, preparation methods 1 and 2 on pages 81-83 do not require processes using collagenase. Applicants assert that those skilled in the art, in view of, for example Example 3, page 83, lines 28-29 of WO2005/042730 would have clearly understood that

the stem cells are characterized based on the stem cells obtained via the methods disclosed in Example 2, in this case, a method in which stem cells are obtained without collagenase treatment.

Importantly, Applicants assert that evidence of record to support the claimed unexpected significant effects can be found throughout the specification as filed. Specifically, Applicants assert that, for example, page 81, lines 1-4 of WO2005/042730 describes that the methods of the claimed invention (i.e., without collagenase treatment) are distinct from conventional methods and stem cells from fat tissue prepared by conventional methods in that there is no contamination of enzymes such as collagenase. Additionally, as indicated in Example 3, page 86, lines 15-19 of WO2005/042730, stem cells prepared by using the method of the claimed invention (i.e., without collagenase treatment), can be easily and efficiently differentiated into vascular endothelium (vascularization).

In light of the above, Applicants assert that the specification as filed is adequately described so that those skilled in the art would easily and unambiguously understand that the stem cell of the claimed invention is prepared without collagenase treatment.

The Examiner next rejects claims 1-15, 18-24, 26-31 and 44-46 under 35 USC 103(a) as being unpatentable over Pitt (WO 00/53795) in view of Artec (WO 01/62901). More particularly, the Examiner asserts that Pitt teaches a method of preparing a stem cell by treating the sample with collagenase, while Artec teaches a method of preparing a stem cell by taking a lipoaspirate sample and centrifuging the sample to separate the cells from other cells including erythrocytes. Thus, the Examiner maintains that the claimed invention would have been obvious in light of the disclosures of Pitt and Artec. Applicants respectfully traverse.

Applicants assert that, as indicated above, the claimed invention is clearly and adequately described in the specification as filed. Additionally, Applicants wish to highlight that the specification as filed further demonstrates and supports that the claimed invention actually gets better results when collagenase treatment is not employed in the methods for obtaining stem cells of the claimed invention.

Applicants reiterate that the method of the claimed invention is simple and works in a surprisingly efficient manner, as compared to conventional techniques whereby the

use of collagenase is required to separate fat tissue from the starting liposuction material (e.g., page 80, line 30 to page 81, line 4 of WO2005/042730). Further, Applicants assert that the method of the claimed invention, whereby the use of collagenase is excluded, results in stem cells that can easily and efficiently be differentiated into vascular endothelium vascularization (e.g., page 86, lines 15-19 of WO2005/042730).

In contrast, Applicants assert that none of the cited references teach, contemplate or even suggest the method of the claimed invention. Applicants continue to assert that Pitt and Artecel are limited to preparing adipose-derived stem cells from liposuction, in which collagenase treatment is essential to remove extracellular matrices to separate cells from fat tissue (e.g., page 4, line 5 of Pitt and page 6, lines 29-30 of Artecel). In this regard, Applicants assert that, in view of the disclosure on, for example, page 81, lines 3-4 of WO2005/042730, that the step of collagenase treatment, if employed in the method for preparing a stem cell, is a source of contamination and often time consuming.

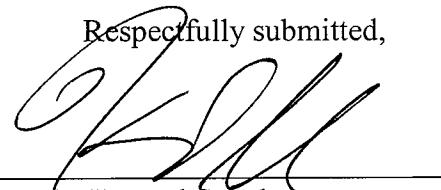
Applicants assert that those skilled in the art, even in view of the disclosures of Pitt and Artecel, would not have been motivated to conceive the method of the claimed invention, which excludes collagenase treatment. The claimed invention is therefore inventive in view of the prior art.

Dependent claims 2-13, 15, 18-21, 23-24, 26-31 and 44-46 variously depend from 1, 14 and 22, so Applicants assert that dependent claims 2-13, 15, 18-21, 23-24, 26-31 and 44-46 are differentiated from the cited references for the same reasons as set forth above, in addition to their own respective features.

Applicants respectfully submit that the pending claims are in condition for allowance. The Commissioner is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account No. 19-2814. Applicants invite

the Examiner to telephone the undersigned, if the Examiner has any questions regarding this Reply or the present application in general.

Dated: November 29, 2010

By: 

Respectfully submitted,

Howard Sobelman
Reg. No. 39,038

SNELL & WILMER L.L.P.
400 E. Van Buren
One Arizona Center
Phoenix, Arizona 85004
Phone: 602-382-6228
Fax: 602-382-6070
Email: hsobelman@swlaw.com